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<!--StartFragment-->RESULT 2
ABA00656
ID    ABA00656 standard; cDNA; 3400 BP.
XX
AC    ABA00656;
XX
DT    19-FEB-2003  (first entry)
XX
DE    Human ENZM-4 cDNA, incyte ID No: 3535146CB1.
XX
KW    Gene; ENZM; cardiovascular disorder; arteriovenous fistula; prostate;
KW    atherosclerosis; hypertension; Raynaud's disease; aneurysm; cervix;
KW    varicose vein; thrombophlebitis; congestive heart failure; brain; breast;
KW    angina pectoris; ischaemic; heart disease; autoimmune; inflammation;
KW    acquired immunodeficiency syndrome; anaemia; asthma; Crohn's disease;
KW    neurological disorder; epilepsy; Huntington's disease; dementia; stroke;
KW    Alzheimer's disease; Creutzfeldt-Jakob disease; multiple sclerosis;
KW    cerebral palsy; Parkinson's disease; anxiety; schizophrenia; amnesia;
KW    metabolic disorder; Addison's disease; goitre; infection; sarcoma;
KW    pneumonia; hepatitis; influenza; immune deficiency; thymic dysplasia;
KW    severe combined immunodeficiency disease; reproduction; infertility;
KW    endometriosis; prostatis; Peyronie's disease; impotence; eye disorder;
KW    glaucoma; ocular hypertension; cell proliferation; psoriasis; myeloma;
KW    polycythemia vera; cancer; adenocarcinoma; leukemia; lymphoma; melanoma;
KW    MDMCSF; ss.
XX
OS    Homo sapiens.
XX
FH    Key                Location/Qualifiers
FT    CDS                66. .3002
FT                       /*tag=  a
FT                       /product= "ENZM-4 protein"
XX
PN    WO200283873-A2.
XX
PD    24-OCT-2002.
XX
PF    10-APR-2002; 2002WO-US015253.
XX
PR    13-APR-2001; 2001US-0283793P.
PR    16-MAY-2001; 2001US-0291544P.
PR    25-MAY-2001; 2001US-0293572P.
PR    27-JUL-2001; 2001US-0308182P.
PR    09-AUG-2001; 2001US-0311447P.
PR    29-AUG-2001; 2001US-0315874P.
PR    14-SEP-2001; 2001US-0322181P.
XX
PA    (INCY-) INCYTE GENOMICS INC.
XX
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PI    Tang YT,  Yue H,  Sanjanwala MM,  Ramkumar J,  Yao MG,  Swarnakar A;
PI    Ding L,  Elliott VS,  Griffin JA,  Li JX,  Lal PG,  Lu DAM,  Lu Y;
PI    Gorvad AE,  Forsythe IJ,  Duggan BM,  Thangavelu K,  Emerling BM;
PI    Hafalia AJA,  Baughn MR,  Becha S,  Sprague WW;
XX
DR    WPI; 2003-075542/07.
DR    P-PSDB; AAG79674.
XX
PT    New human enzymes and polynucleotides, useful for diagnosing, treating or
PT    preventing cardiovascular disorders (e.g. aneurysms), neurological
PT    disorders (e.g. Parkinson's disease), cancers or autoimmune/inflammatory
PT    disorders.
XX
PS    Claim 5; Page 194-95; 203pp; English.
XX
CC    The sequences given in ABA00653-64 encode human enzymes designated ENZM.
CC    The polypeptide or polynucleotide of the invention are useful for
CC    treating a disease or condition associated with decreased expression of
CC    functional ENZM. Antagonists of ENZM are useful for treating a disease or
CC    condition associated with overexpression of functional ENZM. Anti-ENZM
CC    antibodies are particularly useful for diagnosing, treating or preventing
CC    cardiovascular disorders (e.g. arteriovenous fistula, atherosclerosis,
CC    hypertension, Raynaud's disease, aneurysms, varicose veins,
CC    thrombophlebitis, congestive heart failure, angina pectoris, ischaemic
CC    heart disease or rheumatic heart disease), autoimmune/inflammatory
CC    disorders (e.g. acquired immunodeficiency syndrome, anaemia, asthma, or
CC    Crohn's disease), neurological disorders (e.g. epilepsy, Huntington's
CC    disease, dementia, stroke, Alzheimer's disease, Creutzfeldt-Jakob
CC    disease, multiple sclerosis, cerebral palsy, Parkinson's disease,
CC    anxiety, schizophrenia or amnesia), metabolic disorders (e.g. Addison's
CC    disease or goitre), infectious disorders (e.g. viral infection,
CC    pneumonia, hepatitis or influenza), immune deficiencies (e.g. thymic
CC    dysplasia or severe combined immunodeficiency disease), reproductive
CC    disorders (e.g. infertility, endometriosis, prostatis, Peyronie's disease
CC    or impotence), eye disorders (e.g. glaucoma or ocular hypertension), or
CC    cell proliferative disorders (e.g. psoriasis, polycythemia vera, or
CC    cancers including adenocarcinoma, leukemia, lymphoma, melanoma, myeloma,
CC    sarcoma, or cancers of the brain, breast, cervix or prostate). The
CC    protein encoded by this sequence is homologous to human MDMCSF
XX
SQ    Sequence 3400 BP; 894 A; 809 C; 908 G; 789 T; 0 U; 0 Other;

    Query Match            100.0%;  Score 2934;  DB 8;  Length 3400;
    Best Local Similarity  100.0%;  Pred. No. 0;
    Matches 2934;  Conservative   0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 ATGGGCACGCGTCTGCCGCTCGTCCTGCGCCAGCTCCGCGCGCCCGCCCCAGCCCCGGGC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     66 ATGGGCACGCGTCTGCCGCTCGTCCTGCGCCAGCTCCGCGCGCCCGCCCCAGCCCCGGGC 125
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Qy      61  CCTCCGCGCCGCCTCCGTGTGCCCTGTCGCGCTAGCAGCGGCGGCGGCGGAGGCGGCGGC  120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     126  CCTCCGCGCCGCCTCCGTGTGCCCTGTCGCGCTAGCAGCGGCGGCGGCGGAGGCGGCGGC  185

Qy     121  GGTGGCCGGGAGGGCCTGCTTGGACAGCGGCGGCCGCAGGATGGCCAGGCCCGGAGCAGC  180
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     186  GGTGGCCGGGAGGGCCTGCTTGGACAGCGGCGGCCGCAGGATGGCCAGGCCCGGAGCAGC  245

Qy     181  TGCAGCCCCGGCGGCCGAACGCCCGCGGCGCGGGACTCCATCGTCAGAGAAGTCATTCAG  240
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     246  TGCAGCCCCGGCGGCCGAACGCCCGCGGCGCGGGACTCCATCGTCAGAGAAGTCATTCAG  305

Qy     241  AATTCAAAAGAAGTTCTAAGTTTATTGCAAGAAAAAAACCCTGCCTTCAAGCCGGTTCTT  300
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     306  AATTCAAAAGAAGTTCTAAGTTTATTGCAAGAAAAAAACCCTGCCTTCAAGCCGGTTCTT  365

Qy     301  GCAATTATCCAGGCAGGTGACGACAACTTGATGCAGGAAATCAACCAGAATTTGGCTGAG  360
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     366  GCAATTATCCAGGCAGGTGACGACAACTTGATGCAGGAAATCAACCAGAATTTGGCTGAG  425

Qy     361  GAGGCTGGTCTGAACATCACTCACATTTGCCTCCCTCCAGATAGCAGTGAAGCCGAGATT  420
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     426  GAGGCTGGTCTGAACATCACTCACATTTGCCTCCCTCCAGATAGCAGTGAAGCCGAGATT  485

Qy     421  ATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTTGCCCTTCAGATC  480
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     486  ATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTTGCCCTTCAGATC  545

Qy     481  TCTGAGAACTTGTTTAGCAACAAAGTCCTCAATGCCTTGAAACCAGAAAAAGATGTGGAT  540
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     546  TCTGAGAACTTGTTTAGCAACAAAGTCCTCAATGCCTTGAAACCAGAAAAAGATGTGGAT  605

Qy     541  GGAGTAACAGACATAAACCTGGGGAAGCTGGTGCGAGGGGATGCCCATGAATGTTTTGTT  600
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     606  GGAGTAACAGACATAAACCTGGGGAAGCTGGTGCGAGGGGATGCCCATGAATGTTTTGTT  665

Qy     601  TCACCTGTTGCCAAAGCTGTAATTGAACTTCTTGAAAAATCAGGTGTCAACCTAGATGGA  660
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     666  TCACCTGTTGCCAAAGCTGTAATTGAACTTCTTGAAAAATCAGGTGTCAACCTAGATGGA  725

Qy     661  AAGAAGATTTTGGTAGTGGGGGCCCATGGGTCTTTGGAAGCTGCTCTACAATGCCTGTTC  720
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     726  AAGAAGATTTTGGTAGTGGGGGCCCATGGGTCTTTGGAAGCTGCTCTACAATGCCTGTTC  785

Qy     721  CAGAGAAAAGGGTCCATGACAATGAGCATCCAGTGGAAAACACGCCAGCTTCAAAGCAAG  780
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     786  CAGAGAAAAGGGTCCATGACAATGAGCATCCAGTGGAAAACACGCCAGCTTCAAAGCAAG  845
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Qy    781  CTTCACGAGGCTGACATTGTGGTCCTAGGCTCACCTAAGCCAGAAGAGATTCCCCTTACT  840
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    846  CTTCACGAGGCTGACATTGTGGTCCTAGGCTCACCTAAGCCAGAAGAGATTCCCCTTACT  905

Qy    841  TGGATACAACCAGGAACTACTGTTCTCAACTGCTCCCATGACTTCCTGTCAGGGAAGGTT  900
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    906  TGGATACAACCAGGAACTACTGTTCTCAACTGCTCCCATGACTTCCTGTCAGGGAAGGTT  965

Qy    901  GGGTGTGGCTCTCCAAGAATACATTTTGGTGGACTCATTGAGGAAGATGATGTGATTCTC  960
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    966  GGGTGTGGCTCTCCAAGAATACATTTTGGTGGACTCATTGAGGAAGATGATGTGATTCTC  1025

Qy    961  CTTGCTGCAGCTCTGCGAATTCAGAACATGGTCAGTAGTGGAAGGAGATGGCTTCGTGAA  1020
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1026 CTTGCTGCAGCTCTGCGAATTCAGAACATGGTCAGTAGTGGAAGGAGATGGCTTCGTGAA  1085

Qy    1021 CAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTTCAGCCTCTCTCCCCTGTGCCA  1080
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1086 CAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTTCAGCCTCTCTCCCCTGTGCCA  1145

Qy    1081 AGTGACATTGAGATTTCAAGAGGACAAACTCCAAAAGCTGTGGATGTCCTTGCCAAGGAG  1140
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1146 AGTGACATTGAGATTTCAAGAGGACAAACTCCAAAAGCTGTGGATGTCCTTGCCAAGGAG  1205

Qy    1141 ATTGGATTGCTTGCAGATGAAATTGAAATCTATGGCAAAAGCAAAGCCAAAGTACGTTTG  1200
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1206 ATTGGATTGCTTGCAGATGAAATTGAAATCTATGGCAAAAGCAAAGCCAAAGTACGTTTG  1265

Qy    1201 TCCGTGCTAGAAAGGTTAAAGGATCAAGCAGATGGAAAATACGTCTTAGTTGCTGGGATC  1260
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1266 TCCGTGCTAGAAAGGTTAAAGGATCAAGCAGATGGAAAATACGTCTTAGTTGCTGGGATC  1325

Qy    1261 ACACCCACCCCTCTTGGAGAAGGGAAGAGCACAGTCACCATCGGGCTTGTGCAGGCTCTG  1320
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1326 ACACCCACCCCTCTTGGAGAAGGGAAGAGCACAGTCACCATCGGGCTTGTGCAGGCTCTG  1385

Qy    1321 ACCGCACACCTGAATGTCAACTCCTTTGCCTGCTTGAGGCAGCCTTCCCAAGGACCGACG  1380
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1386 ACCGCACACCTGAATGTCAACTCCTTTGCCTGCTTGAGGCAGCCTTCCCAAGGACCGACG  1445

Qy    1381 TTTGGAGTGAAAGGAGGAGCCGCGGGTGGTGGATATGCCCAGGTCATCCCCATGGAGGAG  1440
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1446 TTTGGAGTGAAAGGAGGAGCCGCGGGTGGTGGATATGCCCAGGTCATCCCCATGGAGGAG  1505

Qy    1441 TTCAACCTTCACTTGACTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCT  1500
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1506 TTCAACCTTCACTTGACTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCT  1565

Qy    1501 GCCGCCATCGACACGAGGATTCTTCATGAAAACACGCAAACAGATAAGGCTCTGTATAAT  1560
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                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1566  GCCGCCATCGACACGAGGATTCTTCATGAAAACACGCAAACAGATAAGGCTCTGTATAAT  1625

Qy    1561  CGGCTGGTTCCTTTAGTGAATGGTGTCAGAGAATTTTCAGAAATTCAGCTTGCTCGGCTA  1620
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1626  CGGCTGGTTCCTTTAGTGAATGGTGTCAGAGAATTTTCAGAAATTCAGCTTGCTCGGCTA  1685

Qy    1621  AAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTGACAGAAGAGGAAGTGAGTAAA  1680
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1686  AAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTGACAGAAGAGGAAGTGAGTAAA  1745

Qy    1681  TTTGCCCGTCTCGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGATACAAAT  1740
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1746  TTTGCCCGTCTCGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGATACAAAT  1805

Qy    1741  GACCGATTTCTACGAAAAATAACCATCGGGCAGGGAAACACAGAGAAGGGCCATTACCGG  1800
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1806  GACCGATTTCTACGAAAAATAACCATCGGGCAGGGAAACACAGAGAAGGGCCATTACCGG  1865

Qy    1801  CAGGCGCAGTTTGACATCGCAGTGGCCAGCGAGATCATGGCGGTGCTGGCCCTGACGGAC  1860
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1866  CAGGCGCAGTTTGACATCGCAGTGGCCAGCGAGATCATGGCGGTGCTGGCCCTGACGGAC  1925

Qy    1861  AGCCTCGCAGACATGAAGGCACGGCTGGGAAGGATGGTGGTGGCCAGTGACAAAGCGGG  1920
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1926  AGCCTCGCAGACATGAAGGCACGGCTGGGAAGGATGGTGGTGGCCAGTGACAAAGCGGG  1985

Qy    1921  CAGCCTGTGACAGCAGATGATTTGGGGGTGACAGGTGCTTTGACAGTTTTGATGAAAGAT  1980
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1986  CAGCCTGTGACAGCAGATGATTTGGGGGTGACAGGTGCTTTGACAGTTTTGATGAAAGAT  2045

Qy    1981  GCAATAAAACCAAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCGTGCATGCGGGC  2040
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2046  GCAATAAAACCAAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCGTGCATGCGGGC  2105

Qy    2041  CCTTTTGCTAACATTGCTCACGGCAACTCTTCAGTGTTGGCTGATAAAATTGCCCTGAAA  2100
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2106  CCTTTTGCTAACATTGCTCACGGCAACTCTTCAGTGTTGGCTGATAAAATTGCCCTGAAA  2165

Qy    2101  CTGGTTGGTGAAGAAGGATTTGTAGTGACCGAAGCTGGCTTTGGTGCTGACATCGGAATG  2160
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2166  CTGGTTGGTGAAGAAGGATTTGTAGTGACCGAAGCTGGCTTTGGTGCTGACATCGGAATG  2225

Qy    2161  GAGAAATTCTTCAACATCAAGTGCCGAGCTTCCGGCTTGGTGCCCAACGTGGTTGTGTTA  2220
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2226  GAGAAATTCTTCAACATCAAGTGCCGAGCTTCCGGCTTGGTGCCCAACGTGGTTGTGTTA  2285

Qy    2221  GTGGCAACGGTGCGAGCTCTGAAGATGCATGGAGGCGGGCCAAGTGTAACGGCTGGTGTT  2280
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db    2286  GTGGCAACGGTGCGAGCTCTGAAGATGCATGGAGGCGGGCCAAGTGTAACGGCTGGTGTT  2345

Qy    2281  CCTCTTAAGAAAGAATATACAGAGGAGAACATCCAGCTGGTGGCAGACGGCTGCTGTAAC  2340
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2346  CCTCTTAAGAAAGAATATACAGAGGAGAACATCCAGCTGGTGGCAGACGGCTGCTGTAAC  2405

Qy    2341  CTCCAGAAGCAAATTCAGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAAT  2400
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2406  CTCCAGAAGCAAATTCAGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAAT  2465

Qy    2401  GTCTTCAAGACCGACACCCGCGCTGAGATTGACTTGGTGTGTGAGCTTGCAAAGCGGGCT  2460
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2466  GTCTTCAAGACCGACACCCGCGCTGAGATTGACTTGGTGTGTGAGCTTGCAAAGCGGGCT  2525

Qy    2461  GGTGCCTTTGATGCAGTCCCCTGCTATCACTGGTCGGTTGGTGGAAAAGGATCGGTGGAC  2520
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2526  GGTGCCTTTGATGCAGTCCCCTGCTATCACTGGTCGGTTGGTGGAAAAGGATCGGTGGAC  2585

Qy    2521  TTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAGAAGCCGATTCCAGTTCCTGTATGAT  2580
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2586  TTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAGAAGCCGATTCCAGTTCCTGTATGAT  2645

Qy    2581  GTTCAGGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGAGCCAAA  2640
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2646  GTTCAGGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGAGCCAAA  2705

Qy    2641  GATATTGAACTCTCTCCTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTT  2700
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2706  GATATTGAACTCTCTCCTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTT  2765

Qy    2701  GGAAATTTGCCCATCTGCATGGCAAAGACCCCACCTTTCTCTATCTCACCAACCTGACAAA  2760
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2766  GGAAATTTGCCCATCTGCATGGCAAAGACCCCACCTTTCTCTATCTCACCAACCTGACAAA  2825

Qy    2761  AAAGGTGTGCCAAGGGACTTCATCTTACCTATCAGTGACGTCCGGGCCAGCATAGGCGCT  2820
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2826  AAAGGTGTGCCAAGGGACTTCATCTTACCTATCAGTGACGTCCGGGCCAGCATAGGCGCT  2885

Qy    2821  GGGTTCATTTACCCTTTGGTCGGAACGATGAGCACCATGCCAGGACTGCCCACCCGGCCC  2880
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2886  GGGTTCATTTACCCTTTGGTCGGAACGATGAGCACCATGCCAGGACTGCCCACCCGGCCC  2945

Qy    2881  TGCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTTC  2934
            |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2946  TGCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTTC  2999
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<!--EndFragment-->